

EASTERN SCREECH-OWL (*OTUS ASI/O*) SUCCESSFULLY HATCHESWOOD DUCK (*AIX SPONSA*) EGG

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Throughout much of the eastern United States, Eastern Screech-Owls are found in forested habitats consisting primarily of second-growth timber. Consequently, natural cavities for nesting owls may be the limiting factors for their distribution. In areas where natural cavities occur at low densities, Eastern Screech-Owls nest in a variety of sites, including nest boxes (Van Camp and Henny 1975, McComb and Noble 1981, Fowler and Dimmick 1983, Gehlbach 1994a). In areas managed for waterfowl, observations of Eastern Screech-Owls using Wood Duck nest boxes are common (Bellrose and Holm 1994), but this is the first account of an Eastern Screech-Owl incubating and hatching a Wood Duck egg.

During January to June 1996, I monitored the nesting dynamics of Wood Ducks breeding on the Bradley Unit of Eufaula National Wildlife Refuge, located on the border of Georgia and Alabama (32°N, 85°W). During this period, I located three Eastern Screech-Owl nests that were initiated in Wood Duck boxes. Two female screech owls established nests in empty boxes containing only wood chips. However, one Eastern Screech-Owl evicted a female Wood Duck during the egg-laying period. Because breeding Wood Ducks are away from their nests for most of the day during egg-laying (Bellrose and Holm 1994), Eastern Screech-Owls occasionally usurp nest sites (Gehlbach 1994b). Wood Ducks may stop laying in these nest sites due to

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continued use by Eastern Screech-Owls throughout much of the day (Bellrose and Holm 1994, Gehlbach 1994b).

On 11 April 1996, six Wood Duck eggs were observed. The eggs were covered with wood chips, but cold. One week later on 18 April, the nest contained three Eastern Screech-Owl eggs positioned on top of seven Wood Duck eggs. The female Eastern Screech-Owl had apparently evicted the Wood Duck and was observed incubating three owl eggs on 2 May.

Because incubation periods average 30 days for both species, Eastern Screech-Owls are capable of hatching Wood Duck eggs (Gehlbach 1995, Haramis 1990). Subsequent inspection of this nest on 29 May revealed that the female Eastern Screech-Owl apparently hatched at least one owl and one duckling. A newly hatched duckling was present in the box with the brooding female. Egg shell fragments from both species were identified in the nest, refuting the possibility that this occurrence was merely a feeding attempt. In addition, four Wood Duck eggs and one Eastern Screech-Owl egg were found intact in the box. Fate of two remaining Wood Duck eggs could not be determined.

This observation is the only reported instance of an Eastern Screech-Owl successfully incubating and hatching a waterfowl egg. Research involving breeding ecology of Eastern Screech-Owls should focus on their ability to evict nest competitors and how this affects relative clutch size and hatching success.

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